

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-47. (Cancelled)

48. (Previously presented) The method of Claim 66, comprising detecting expression of at least one polynucleotide selected from the group consisting of: E-cadherin polynucleotides (represented by SEQ ID NO:3) and ErbB3 polynucleotides (represented by SEQ ID NO:15 or SEQ ID NO:133).

49. (Previously presented) The method of Claim 66, comprising detecting expression of E-cadherin polynucleotides (represented by SEQ ID NO:3), wherein expression of E-cadherin polynucleotides in the patient's tumor cells is correlated with sensitivity to the EGFR inhibitor.

50. (Cancelled)

51. (Withdrawn-Previously presented) The method of Claim 66, comprising detecting expression of at least one polynucleotide selected from the group consisting of ZEB1 polynucleotides and SIP1 polynucleotides, wherein expression of ZEB1 polynucleotides or SIP1 polynucleotides in the patient's tumor cells is correlated with resistance to the EGFR inhibitor.

52. (Withdrawn-Previously presented) The method of Claim 51, wherein detection of expression of ZEB1 polynucleotides or SIP1 polynucleotides in the patient's tumor cells indicates the recruitment of histone deacetylase HDAC in the tumor cells of the patient.

53. (Previously presented) The method of Claim 66, wherein the EGFR inhibitor is gefitinib.

54. (Cancelled)

55. (Previously presented) The method of Claim 66, wherein expression of the polynucleotides is detected by:

- a) measuring amounts of transcripts of the polynucleotide in the tumor cells;
- b) detecting hybridization of at least a portion of the polynucleotide or a transcript thereof to a nucleic acid molecule comprising a portion of the polynucleotide or a transcript thereof in a nucleic acid array.

56. (Previously presented) The method of Claim 66, wherein the step of comparing comprises comparing the expression of the polynucleotides to expression of the polynucleotides in:

- a) a cell from a non-cancerous cell of the same type;
- b) an autologous, non-cancerous cell from the patient;
- c) a control cell that is resistant to the EGFR inhibitor;
- d) a control cell that is sensitive to the EGFR inhibitor; or
- e) a predetermined level of expression of the polynucleotides.

57. (Currently amended) A method to select a lung cancer patient who is predicted to benefit from therapeutic administration of an EGFR inhibitor selected from the group consisting of gefitinib and erlotinib, an agonist thereof, or a drug having substantially similar biological activity as EGFR inhibitor, comprising selecting a patient with tumor cells expressing one or both of E-cadherin polynucleotides and ErbB3 polynucleotides as predicted to benefit from therapeutic administration of the EGFR inhibitor, or selecting a patient with tumor cells expressing one or both of ZEB1 polynucleotides and SIP1 polynucleotides as not predicted to benefit from therapeutic administration of the EGFR inhibitor.

58. (Previously presented) The method of Claim 57, wherein expression of E-cadherin polynucleotides or ErbB3 polynucleotides in the patient tumor cells is compared to a statistically significant expression level of E-cadherin polynucleotides or ErbB3 polynucleotides, respectively, in at least one control cell that is sensitive to the EGFR inhibitor.

59. (Withdrawn-Previously presented) The method of Claim 57, wherein expression of ZEB1 polynucleotides or SIP1 polynucleotides in the patient tumor cells is compared to a statistically significant expression level of ZEB1 polynucleotides or SIP1 polynucleotides, respectively, in at least one control cell that is resistant to the EGFR inhibitor.

60-65. (Cancelled)

66. (Currently amended) A method to select a lung cancer patient who is predicted to benefit from therapeutic administration of an EGFR inhibitor selected from the group consisting of gefitinib and erlotinib, an agonist thereof, or a drug having substantially similar biological activity as EGFR inhibitor, comprising:

- a) detecting in a sample of tumor cells from a patient to be tested, the expression of a polynucleotide whose expression has been correlated with sensitivity or resistance to ~~an~~ EGFR ~~the EGFR~~ inhibitor, the polynucleotide being selected from the group consisting of E-cadherin polynucleotides, ErbB3 polynucleotides, RAB25 polynucleotides, integrin beta 6 (ITGB6) polynucleotides, ZEB1 polynucleotides and SIP1 polynucleotides;
- b) comparing the level of expression of the polynucleotides detected in the patient sample to a level of expression of the polynucleotides that has been correlated with sensitivity or resistance to the EGFR inhibitor; and
- c) selecting the patient as being predicted to benefit from therapeutic administration of the EGFR inhibitor selected from the group consisting of gefitinib and erlotinib, an agonist thereof, or a drug having substantially similar biological activity as EGFR inhibitor, if the expression level of the polynucleotides in the patient's tumor cells is statistically more similar to the expression level of the polynucleotides that has been correlated with sensitivity to the EGFR inhibitor than to resistance to the EGFR inhibitor.

67. (Previously presented) The method of Claim 66, wherein the polynucleotides is E-cadherin polynucleotides, and the level of expression that has been correlated with sensitivity is a statistically significant level of expression.

68. (Withdrawn – Previously presented) The method of Claim 66, wherein the polynucleotides is ErbB3 polynucleotides, and the level of expression that has been correlated with sensitivity is a statistically significant level of expression.
69. (Withdrawn-Previously presented) The method of Claim 66, wherein the polynucleotides is RAB25 polynucleotides, and the level of expression that has been correlated with sensitivity is a statistically significant level of expression.
70. (Withdrawn-Previously presented) The method of Claim 66, wherein the polynucleotides is ITGB6 polynucleotides, and the level of expression that has been correlated with sensitivity is a statistically significant level of expression.
71. (Withdrawn- Previously presented) The method of Claim 66, wherein the polynucleotides is ZEB1 polynucleotides, and the level of expression that has been correlated with resistance is a statistically significant level of expression.
72. (Withdrawn- Previously presented) The method of Claim 66, wherein the polynucleotides is SIP1 polynucleotides, and the level of expression that has been correlated with resistance is a statistically significant level of expression.
73. (Previously presented) The method of Claim 66, comprising detecting expression of at least one polynucleotide selected from the group consisting of: E-cadherin polynucleotides, ErbB3 polynucleotides, RAB25 polynucleotides and ITGB6 polynucleotides, wherein expression of E-cadherin polynucleotides, ErbB3 polynucleotides, RAB25 polynucleotides or ITGB6 polynucleotides in the patient's tumor cells is correlated with sensitivity to the EGFR inhibitor.
74. (Previously presented) The method of Claim 57, comprising selecting a patient with tumor cells expressing E-cadherin polynucleotides as predicted to benefit from therapeutic administration of the EGFR inhibitor.

75. (Withdrawn- Previously presented) The method of Claim 57, comprising selecting a patient with tumor cells expressing ErbB3 polynucleotides as predicted to benefit from therapeutic administration of the EGFR inhibitor.

76. (Currently Amended) The method of claim 66, wherein the selecting of the patient as being predicted to benefit from therapeutic administration of the EGFR inhibitor, ~~and agonist thereof, or a drug having substantially similar biological activity as the EGFR inhibitor,~~ is if the expression level of the polynucleotide in the patient's tumor cells is regulated in the same direction and from about 5% to about 100% of the expression level of the polynucleotide that has been correlated with sensitivity to the EGFR inhibitor.

77. (Currently Amended) The method of claim 66, wherein the selecting of the patient as being predicted to benefit from therapeutic administration of the EGFR inhibitor, ~~and agonist thereof, or a drug having substantially similar biological activity as the EGFR inhibitor,~~ is if the expression level of the polynucleotide in the patient's tumor cells is regulated in the same direction and from about 10% to about 100% of the expression level of the polynucleotide that has been correlated with sensitivity to the EGFR inhibitor.

78. (Currently Amended) The method of claim 66, wherein the selecting of the patient as being predicted to benefit from therapeutic administration of the EGFR inhibitor, ~~and agonist thereof, or a drug having substantially similar biological activity as the EGFR inhibitor,~~ is if the expression level of the polynucleotide in the patient's tumor cells is regulated in the same direction and from about 25% to about 100% of the expression level of the polynucleotide that has been correlated with sensitivity to the EGFR inhibitor.

79. (Currently Amended) The method of claim 66, wherein the selecting of the patient as being predicted to benefit from therapeutic administration of the EGFR inhibitor, ~~and agonist thereof, or a drug having substantially similar biological activity as the EGFR inhibitor,~~ is if the expression level of the polynucleotide in the patient's tumor cells is regulated in the same

direction and from about 50% to about 100% of the expression level of the polynucleotide that has been correlated with sensitivity to the EGFR inhibitor.

80. (Currently Amended) The method of claim 66, wherein the selecting of the patient as being predicted to benefit from therapeutic administration of the EGFR inhibitor, ~~and an agonist thereof, or a drug having substantially similar biological activity as the EGFR inhibitor~~, is if the expression level of the polynucleotide in the patient's tumor cells is regulated in the same direction and from about 75% to about 100% of the expression level of the polynucleotide that has been correlated with sensitivity to the EGFR inhibitor.

81. (Currently Amended) The method of claim 66, wherein the selecting of the patient as being predicted to benefit from therapeutic administration of the EGFR inhibitor, ~~and an agonist thereof, or a drug having substantially similar biological activity as the EGFR inhibitor~~, if the expression level of the polynucleotide in the patient's tumor cells is regulated in the same direction and to about 100% of the expression level of the polynucleotide that has been correlated with sensitivity to the EGFR inhibitor.